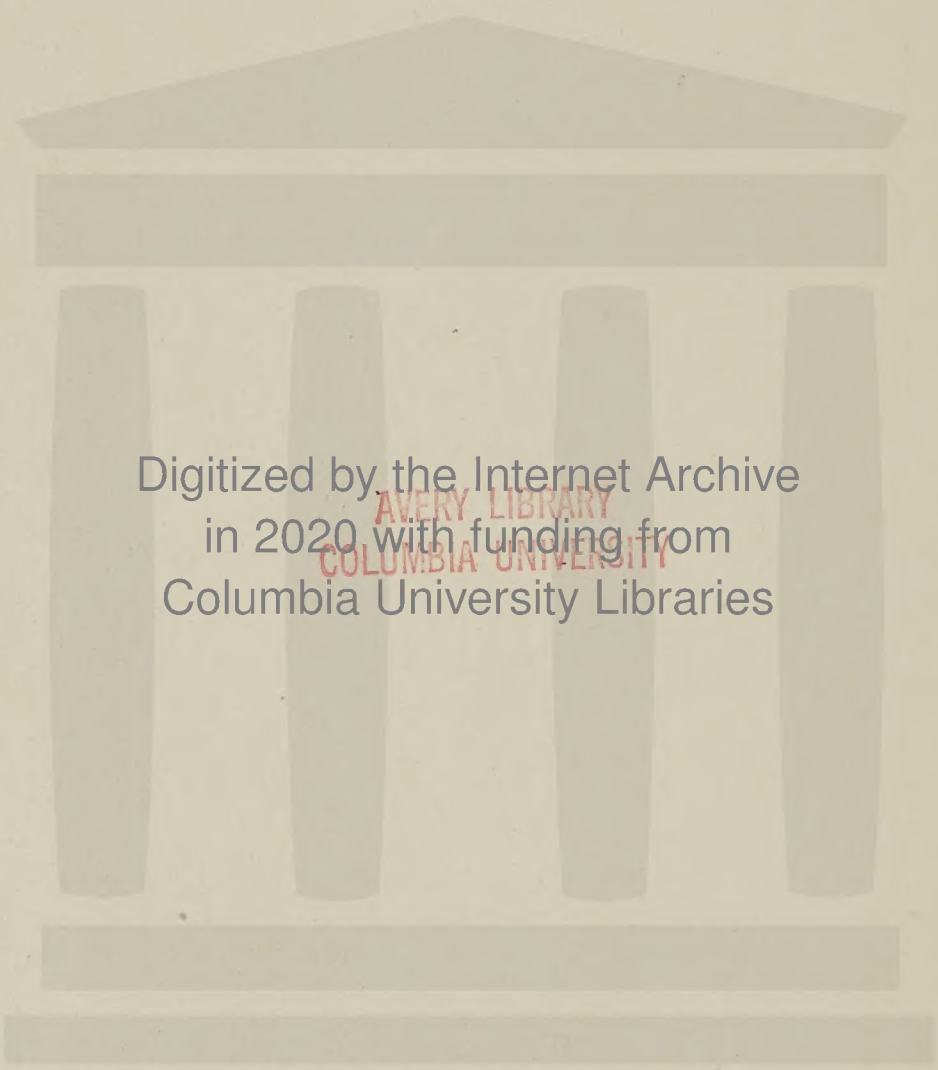
INCREASING HOME ENJOYMENT

Increasing Home Enjoyment

A Booklet Showing the Advantages of Insulation in Homes

INSULITE
the Wood-Fiber Insulating Board

Published by
THE INSULITE CO.
MINNEAPOLIS, MINNESOTA



WHEN you embark on that most fascinating undertaking—building a home, you want every dollar you invest to do its full duty. Some home-building dollars are 75 per cent efficient. Others are 60 per cent efficient and still others only 40 or 50 per cent efficient. You want to make your home-building dollars 100 per cent efficient. You are buying more than just a house. You are purchasing permanent comfort, as well.

Home comfort once meant shelter from rain and wind and snow, a rude hut, or a cave. The Eskimo, in his ice igloo, is comfortable. But what satisfies the Eskimo would seem crude and miserable to us.

Today many things contribute to home enjoyment and comfort. Electrical contrivances, first-class plumbing, built-in features, space and labor-saving devices. But there is no factor that is so necessary to comfort 24 hours a day and 365 days in the year as the correct degree of temperature in the home.

New England Colonial

Insulation for Home Comfort

Many old-fashioned houses were strongly built. Judged by their time they were good houses. But today they would not be considered efficient. They had their cold sides, chilly rooms, and were draughty in cold weather. In the summer they were uncomfortably hot. Builders knew building, but very little about aiding temperature control.

The up-to-date builder today builds insulated houses —houses in which temperature is brought under the ready control of the occupant. There are many reasons why such a house is desirable, as you will realize when you have finished reading this booklet.

What Is Insulation?

Insulation is achieved by the use of proper building materials. An insulating building material is one which

Dutch Colonial

retards the flow of heat. We know that heat flows through certain materials just as water flows through a pipe, or an electric current flows along a copper wire. In such cases heat travels by conduction.

Another example of heat conduction is recognized when we hold an iron poker in a fire. Gradually the heat passes through the iron and the handle becomes so hot that one is forced to drop it. The poker is a heat conductor, not an insulator.

Heat flows readily through plaster, brick, concrete, and other heavy, dense materials. Most materials conduct heat more or less. But there is a class of building materials whose capacity to resist the passage of heat is so great that they have been called insulating materials and as such are now extensively used in all types of buildings.

The Air Space Fallacy Exploded

Science has demonstrated that the best heat insulator is one which possesses a large number of air cells. Do not confuse air cells with "air spaces." The belief that

Old Pennsylvania Farm House

relatively large air spaces provide insulation is an exploded idea. The space in your attic does not serve as an insulator against heat or cold. If anything, it helps to conduct heat away from where it is used. Neither do the air spaces within the walls of a house provide insulation of any consequence.

A good insulating material is one that is made of light, cellular, fibrous material. Insulite is a rigid board insulating material. It is made from wood-fiber and possesses all of the advantages of good insulation plus several additional advantages.

Unbiased tests made by nationally recognized testing laboratories prove that Insulite possesses extremely high insulating value. This insulating efficiency is due to the process by which the material is manufactured. It is made from the long, coarse, tough fibers of spruce and other northern woods. These fibers are felted together in such a way that millions of minute air cells are closely confined within a small mass.

Cape Cod House

Notice how the snow has been melted off roofs except where there is no heat from beneath. This shows the necessity for roof insulation—sure proof that heat escapes readily through uninsulated roofs.

Keeps Heat In Its Place

Due to the presence of these minute air cells, the house in which Insulite insulation is used is a heat-sealed house. Temperature control is more easily accomplished and there are no abrupt temperature changes in such a house.

When you build your new house it will possess tight wall construction and be free from air leakage, draughts, cold sides and chilly rooms if Insulite is used. There will be no chance for wind to penetrate the walls; no dampness; less running down to the basement on cold days and nights to keep the furnace from burning too hard or from going out.

You can banish all of your weather worries. Instead of viewing winter's approach with a shudder, winter will become a season of enjoyment. Not only will you be freed from the petty annoyances caused by a home that is hard to heat and keep heated, but the health of your family will be safeguarded.

Sheltering When It's Sweltering

In summer you can escape from the sweltering heat into your cool, inviting, living room, forgetting how the pavement almost blistered the soles of your feet as you hurried homeward. Your home will not be "a human bake oven" where peaceful sleep is impossible. You can awake each morning, refreshed and invigorated after a good night's rest, prepared to tackle the day's work with vim and zest.

Just as Insulite, the wood-fiber insulating board, holds heat in the house in winter when it is needed inside, so does it also keep the heat out of the house during the hot, sultry days of summer.

The attic of an uninsulated house is intolerably hot on warm days. When summer sun beats down all day long the attic becomes unbearably hot if there is no shield of insulation in the roof. With the roof of the house insulated with Insulite, the attic can be as comfortable as any room in the house and the rooms below the attic will be cool and comfortable, too.

Formal Georgian

Insulite Insulates Against Sound

Not only is it desirable to have your new house insulated for heat, but home enjoyment will be increased if it is insulated for sound, also.

Noise has increased in our daily life with the progress of civilization. Even in residential districts, where years ago one could find peace and quiet, now there can be heard a medley and a riot of noises.

Insulite stops sound in much the same way that it stops heat. Outside sounds and noises will not penetrate walls that are constructed with this insulating material as readily as they do walls of ordinary construction.

Insulite is used in floors to deaden sounds originating in upper rooms. Possibly you dream of having a study in your home where silence will be complete. Insulite will provide you with just such a room. Used in the furnace room, Insulite effectively keeps the noise from oil furnaces from being heard on the floor above.

Southern Colonial

What Price Comfort?

You will probably be curious to know what the many advantages of thorough insulation are going to cost. If the cost of the Insulite and its application are distributed over a period of a few years, you discover to your surprise and delight that the insulating material pays for itself in savings made. In addition to providing you with increased year 'round comfort, Insulite provides economies which pay the original cost, after which it goes right on paying dividends year after year. This saving is due to the smaller amount of fuel needed to heat the house that is insulated with Insulite.

As used at present, heating plants deliver little more than one-half of the heating value of the fuel used. It is therefore important that efficient use be made of the heat developed. Anyone who has witnessed the price of fuel advance during the past few years recognizes the value of any means aimed at conserving heat or making a little

The English Manor House

Showing how the big rigid sheets of Insulite are used as sheathing under brick, affording at one time and at one cost sturdy construction and dependable insulation.

heat go a long way. To show how fuel costs have advanced, "A little house that could be heated through the 1911 season for $60 consumed $120 worth of fuel last winter," says Robert T. Jones, technical director of the Architects' Small House Service Bureau.

Why Insulite Pays Dividends Earlier Than Other Insulating Materials

Added to all of the benefits previously explained, Insulite gives exceptional structural strength to houses when used as sheathing. This bracing strength is due to the large units four feet wide by eight to twelve feet long, in

which Insulite Sheathing is manufactured. Actual experience has shown many times that homes built with Insulite Sheathing stand up against wind-stress, tornado and cyclone, when other houses have collapsed or sustained severe damage.

In addition to serving as sheathing, Insulite is also extensively used in home building as a base for plaster, for wallboard and for roof insulation.

Insulite provides a desirable base for plaster and is made in special units for that purpose known as Insulite Plaster Base. It holds plaster with a grip that is twice as strong as that of wood lath. When moisture leaves plaster, after a plaster-on-lath job has been completed, often plaster is held to the lath by "hooking," rather than by bonding. Plaster gets in the crevices between the lath, where it "keys in," instead of adhering to the surface. When applied to Insulite Plaster Base, plaster hangs on with an almost inseparable bond, due to the millions of tiny fiber hairs created in the manufacturing process. These fibers can be seen extending from the surface of the material when viewed through a magnifying glass.

French

Insulite Plaster Base assures a neat, attractive plaster job. It lends itself admirably to attractive plastering effects, such as plaster coves. At the same time Insulite Plaster Base furnishes high insulating value. When properly applied less trouble is encountered and fewer cracks result than when using wood lath and there will be no lath marks. It is an easy matter to make a clean cut through plaster on Insulite base when necessary to add wiring or plumbing connections. With wood lath it is difficult to do this without starting cracks.

Insulite Wall Board, used for finishing unplastered walls, possesses a rich, creamy, burlap-textured surface, which can be left in its natural state, stenciled, or stained. It serves both for insulation and for decorative treatment. Many wall boards are adequate for interior finish, but none combine beauty and insulating value in the same degree that Insulite Wall Board does.

Insulite is especially efficient when used under roofs and ceilings, as will be explained later. In each of these uses the material serves well, performing its duty to advantage, but in addition it affords insulation, as well.

Why Insulite Makes the Building Dollar Go Farther

We have mentioned the saving in fuel enjoyed every winter by the owner of a house that is insulated with Insulite. While this saving is the major economy effected through the use of this wood-fiber insulating board, still there are several other points in this connection which should be mentioned.

Showing how the special sized units of Insulite 18"x48" are used as plaster base, providing three important results at one cost—plaster base, insulation against heat or cold, as well as insulation against sound.

One of the reasons why Insulite, the wood-fiber insulating board, has won favor among contractors and home builders is due to the ease and economy with which it can be handled and applied. Being light and because of the convenient sizes of the various units, Insulite is easy to handle and apply. A side wall can be covered with sheathing or plaster base in a fraction of the time it would take to cover the same surface with wood sheathing or wood lath.

Insulite Sheathing and Insulite Wall Board are made in big, broad boards, one-half inch thick, 4 feet wide and

8, 9, 10 and 12 feet long. Sheathing and wall board are packed in bundles of 6 pieces each, covered with heavy wrapping paper.

If Insulite is used, building paper is not needed. Here we encounter a worthwhile saving, both in the cost of the building paper and the cost of application.

There is no waste when using Insulite. The large, broad boards are made in uniform sizes. There are no knot-holes or other defects.

Insulite Plaster Base effects a large saving of plaster in addition to providing a high-class plastering job. When plaster is applied on lath there is a loss of plaster, due to the plaster being forced through the space between laths. A large amount falls to the floor inside the wall. Such waste is eliminated by the use of Insulite Plaster Base.

Insulite Plaster Base is made in two thicknesses, one-half inch and one inch. Both units are 18 inches by 48 inches. Half inch Insulite Plaster Base is shiplapped on the long edges. The half-inch thickness comes in bundles of ten pieces, while the inch thickness comes five pieces to a bundle, both bundles being packed in heavy wrapping paper.

Spanish

Insulite One-Inch Plaster Base is made by binding two half-inch pieces of Insulite together with non-corroding staples so that all four edges overlap, insuring a heat-tight job.

If Insulite is used in building your home, it will increase the efficiency of your heating plant to a satisfying degree.

It is safe to say that anyone building a house today who does not provide for sufficient insulation must reconcile himself to accepting a big loss, should he ever want to sell his house. An uninsulated house is going to be increasingly difficult to sell in the future. Circumstances may arise making the sale of your home desirable. When that time arrives your problem will be more easily solved if your home is completely modern,—if it is insulated with Insulite, for Insulite increases the selling and rental value of homes far more than the actual cost of the material and its application.

For The Home Already Built

You may be one of the thousands who live in uninsulated houses. Like many houses, it may be sturdily

Italian

Showing the application of one inch plaster base over attic studs to provide comfortable new rooms, at the same time preventing loss of heat through the roof in winter and entrance of heat through the roof on hot summer days.

built. But the house, in spite of its rare charm, requires a tremendous amount of fuel to keep at a comfortable temperature. And though your fuel bills may pile up, cutting into your income until it literally bleeds, still you find it difficult to keep the house comfortable. It may be hot in summer when you want to keep it cool and it may be cold in winter when you desire it warm. What are you to do?

Tearing away lath and plaster in order to put in insulation would be costly. So would removing exterior siding and wood sheathing to make room for Insulite. No such radical treatment is necessary in order to renovate your house so that it will keep heat inside in winter and keep it outside during the warm months. There are

several ways in which you can accomplish your purpose without excessive expense, which will be discussed in the following pages.

Reducing Heat Loss In Homes Already Built

Roofs that are uninsulated are the greatest sources of heat loss. For that reason a great deal of heat waste can be stopped by thoroughly insulating the roof of the house already built. Fortunately for the person whose home is not insulated, Insulite roof insulation can be applied with little labor cost. The job is a comparatively simple one, calling for no elaborate plans or alterations.

It has been estimated that approximately 55 per cent of heat loss in a building occurs through roof and side walls exclusive of glass area. Sixty-five per cent of this 55 per cent is lost through the roof. In other words about 35 per cent of the total heat loss occurs at the roof. This is quite logical when we realize that warm air rises. If the roof is uninsulated, as many roofs are, naturally the heat will evaporate through it, just as gasoline evaporates from an uncovered tank.

Proper roof insulation serves as a lid to check this wasteful escape of heat. If this loss could be stopped entirely, then it would be possible to save as much as 35 per cent on your fuel at the roof alone. Of course the loss at the roof cannot be stopped entirely, but a large percentage of it can be stopped. The resulting saving would be in addition to the greater year 'round comfort made possible through this application of Insulite.

Insulite can be nailed to the rafters in the attic of the house already built, bestowing its benefits of comfort and economy, as suggested above. For this purpose a one inch thickness is preferable because as already pointed out, the greatest source of heat loss is at the roof and the added thickness more than pays for itself in increased efficiency. There is another method which may be followed with equal effectiveness, so far as maintaining temperature in the main part of the house is concerned. This method is the laying of Insulite over the floor joists in the attic.

Not only can the comfort of the home already built be improved by insulating the roof, but in many cases it is desirable to apply Insulite Plaster Base over interior walls where plaster has cracked. Plaster can then be applied over the Insulite affording fresh looking crackless walls. Or, the exterior of a frame house may be covered with Insulite Sheathing, over which stucco, brick or stone may be applied.

New Mexico Mission

More Rooms To Care For Growing Needs Or Growing Families

Have you ever wished that your house was a little larger? Perhaps you want a den, study, workshop, laboratory or billiard room. Think of the pleasure you can have on long winter evenings! No need to brave the cold weather in search of amusement. Your own home can be made to yield just as much fun and contentment as can be found elsewhere. And it will cost you little.

You can have just the kind of a room you desire, by making use of that large, almost-empty attic, or the unused space in the basement. Many home owners discover that their homes actually contain more rooms than they ever realized. Unused spaces can be converted into delightful rooms for recreation or sleeping rooms for growing members of the family or possibly for a maid, with little labor and at small expense. Insulite Wall Board is admirably adapted to this use.

Such rooms will be comfortable and livable the year 'round. The insulation in the ceiling of attic rooms will serve to keep the entire house more comfortable, the rooms themselves being pleasant and protected against the heat of the sun pouring on the roof.

Insulite may be used to add enjoyable rooms in the basement as well as in the attic. Insulite laid over the concrete floor and covered with linoleum for basement rooms provides a warm floor and eliminates dampness, at the same time affording a practical floor.

Frequently cold air will leak through cracks in foundation masonry. This leakage can be eliminated through

the use of Insulite, thereby increasing the efficiency of your heating plant. Used in the ceiling of the entire basement it prevents cold draughts of basement ventilators from chilling the floor above and keeps dust and furnace dirt from passing upstairs.

Your Garage—Stopping Winter Starting Troubles

To step into his car on a cold winter morning and be able to start the motor without fussing or cussing is the dream of every motorist. A dream that seldom comes true. Why?

If your garage is unheated, if it lacks heat-tight construction which permits the motor to get cold in winter, do not blame the motor if it refuses to budge when you try to start it.

English Cottage

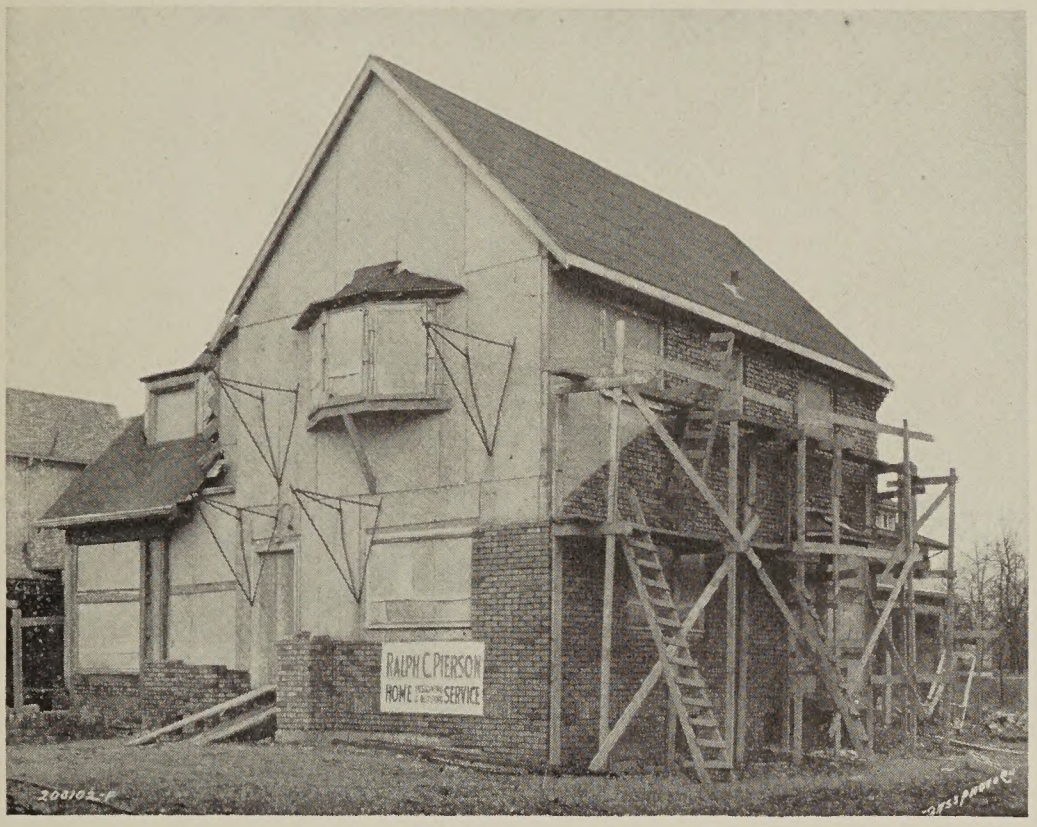
Not only does a cold garage add to life's little annoyances because it makes starting the car an almost hopeless job on a cold morning, but you are constantly running the risk of having your motor freeze up and having the block crack or having your battery become frozen. This may cost you far more than the price of prevention.

Many motorists find that when their garages are lined with Insulite it is unnecessary to heat them. The motor will remain self-heated for hours after being driven into the garage that is built of Insulite. The heat thus generated does not escape quickly from such a garage. In fact, extending the heating plant to include the garage is not required. Neither is a portable oil, gas, or electric heater needed, except for the most severe weather.

For The "Handy-Man-About-The-House"

For the man who is handy with a saw and hammer, applying Insulite presents no problem. The saw, hammer, nails and the man, are all that are needed to achieve a good insulating job. If you are in the habit of tinkering around the house, there are a number of ways you can increase the comfort of your home with Insulite. You can insulate your attic, basement and garage. You can add extra rooms by using Insulite Wall Board, just as has been suggested.

In doing this work you can make your spare time earn big dividends. A job that ordinarily involves expense both for materials and for labor will cost you only the price of the materials. This will increase the livability of your home and also its value, should you desire to dispose of it.



Showing again how the big 4x8 foot sheets of Insulite are used to provide both sheathing and insulation against heat or cold.

No special technical skill or knowledge are required to apply Insulite. The job is simple but it should be performed correctly in order to assure satisfying results.

We have published a booklet explaining how Insulite should be applied. This booklet is free to anyone interested in building with Insulite. Anyone desiring a copy of this booklet should write to The Insulite Co., Minneapolis, Minnesota, asking for "Specifications and Details on the Use and Installation of Insulite." The book is interesting, fully illustrated, easy to read, and of valuable assistance to the builder who uses Insulite.

Making Home Enjoyment And Comfort Permanent

Every home should be a haven where year 'round comfort, increased health and permanent convenience abide. Too often it is not. Some one has said that no one ever went to war to defend a boarding house. It is equally true that a person cannot fight with much spirit and energy for a cold, heat-leaking, draughty, uncomfortable house.

The builder who continues to build houses without giving thought to thorough insulation is out of step with the times. People are no longer satisfied with house beauty that is only skin deep. They want strength, character, and integrity built into their homes.

Your house, when insulated with Insulite, will be a source of enduring satisfaction. It will be the kind of a home you can pass on to your children, secure in the knowledge that generation after generation will find living in it a comfort and a delight, no matter how swiftly the world moves along.

If there are any special questions you wish to ask concerning Insulite, which are not covered in this booklet, they will be answered promptly if you will communicate with the Service Department of the Insulite Co., at Minneapolis, Minnesota. This department is maintained to be of assistance to anyone interested in home construction or remodeling. You are cordially invited to make use of its facilities. The service costs you nothing.

INSULITE

the Wood-Fiber Insulating Board

PRINTED IN U. S. OF A.
FARNHAM PRINTING & STATIONERY CO., MINNEAPOLIS
NO. 18